

---

U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

---

Gordon P. Eaton, Director

Reston, VA 20192

---

For information, contact:

Valentin V. Tepordei, Commodity Specialist

Telephone: (703) 648-7728, Fax: (703) 648-7722

E-mail: [vteporde@usgs.gov](mailto:vteporde@usgs.gov)

Feri Naghdi (Data), (703) 648-7981

Nick Muniz (Data), (703) 648-7980

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

## CRUSHED STONE AND SAND AND GRAVEL IN THE SECOND QUARTER 1997

The estimated output of *crushed stone* produced and shipped for consumption in the second quarter of 1997 was 370.9 million metric tons, an increase of 4.7% compared with the same period of 1996. The estimated output of *construction sand and gravel* produced and shipped for consumption in the second quarter of 1997 was 264.7 million metric tons, an increase of only 0.3% compared with the same period of 1996.

These estimates are based on the information reported to the U.S. Geological Survey quarterly sample survey by the *crushed stone* and *sand and gravel* producers.

The increases in production of both *crushed stone* and *construction sand and gravel* are mostly due to the high level of activity in private and commercial construction work during this quarter of 1997. It should be noted that in the second quarter of 1997 there was also an increase in portland cement consumption.

The estimated output of *crushed stone* produced for consumption in the first 6 months of 1997 was 605.8 million metric tons, an increase of 7.5% compared with the same period of 1996. The estimated output of *construction sand and gravel* produced for consumption in the first 6 months of 1997 was 425.4 million metric tons, an increase of 2.6% compared with the same period of 1996.

The quarterly survey is a sample survey that generates production estimates by quarters for each State, except Alaska and Hawaii, and each U.S. Census geographic division, based on information reported voluntarily by a limited number of producing companies. Occasionally, the number of companies reporting in an area varies from quarter to quarter, or previously reported data by some companies are revised. As a result of such changes in the size or the composition of the statistical sample, the estimated quantities for prior quarters are recalculated. The latest release of the Quarterly Mineral

Industry Surveys contains the most recent estimated totals and percentage changes and supersedes previously published similar information.

The production estimates for *crushed stone* and *sand and gravel*, are generated independently for each State and geographic division, which are treated as separate statistical sample areas. Therefore, some differences may exist between the total for a division and the sum of State totals that are part of the same geographic division.

The leading geographic divisions in the production of *crushed stone* in the second quarter of 1997 were the South Atlantic with 88.6 million metric tons, or 23.9% of the U.S. total, followed by the East North Central with 71.7 million metric tons, or 19.3%, and the West North Central division with 45.5 million metric tons, or 12.3% of the total.

For *construction sand and gravel*, the leading geographic divisions were the East North Central division with 55.8 million metric tons, or 21.1% of the U.S. total, followed by the Pacific with 46.8 million metric tons, or 17.7%, and the Mountain division with 41.8 million metric tons, or 15.8% of the total. The estimated totals by quarters for the geographic divisions do not include Alaska and Hawaii.

The six leading States in the production of *crushed stone* in the second quarter of 1997 were Pennsylvania, Texas, Illinois, Missouri, North Carolina, and Ohio. Their combined total production represented 33.2% of the U.S. total.

The six leading States in the production of *construction sand and gravel* in the second quarter of 1997 were California, Texas, Michigan, Minnesota, Illinois, and Ohio. Their combined total production represented 36.8% of the U.S. total.

A total of 380 *crushed stone* and *construction sand and gravel* companies and subsidiaries reported production information to the second quarter sample survey. The

participation of most of the major producing companies in this survey is reflected by the high percentage coverage obtained for most geographic divisions and States. The percentage coverage indicates how much of the total estimated production for a State or a geographic division was actually reported by companies participating in this survey and was used to generate

the estimated totals for that particular area. The percent changes between the estimated production for the current quarter and the same quarter of the prior year included in this report are important indicators of the production/consumption trends occurring in a particular area of the country.

TABLE 1  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/  
(Thousand metric tons and thousand dollars)

Region/Division	1996					1997					
	Quantity				Value total 2/	Quantity 1st Qtr.	Per- cent change 3/	Quantity 2nd Qtr.	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	2nd Qtr.	3rd Qtr.	4th Qtr.	Total 2/							
Northeast:											
New England	7,500	8,900	7,300	25,100	180,000	1,900	27.3	7,300	-1.9	55	16
Middle Atlantic	41,800	50,500	42,600	152,000	899,000	21,400	23.6	44,800	7.1	57	40
Midwest:											
East North Central	65,900	88,500	68,500	249,000	1,150,000	33,900	28.3	71,700	8.7	68	48
West North Central	40,200	48,100	39,400	150,000	756,000	25,900	15.1	45,500	13.2	51	42
South:											
South Atlantic	88,500	88,000	82,100	318,000	1,930,000	70,000	17.8	88,600	0.1	82	55
East South Central	42,600	47,600	39,800	156,000	710,000	29,000	13.9	43,800	2.8	65	21
West South Central	36,000	39,300	35,600	145,000	661,000	29,400	-13.6	38,000	5.6	65	31
West:											
Mountain	9,600	10,400	8,600	34,400	192,000	6,300	7.3	10,200	6.5	54	21
Pacific 5/	22,000	24,900	22,200	85,800	476,000	17,000	1.3	20,900	-5.0	40	25
Total 2/	354,200	406,100	346,100	6/1,330,000	6/7,110,000	234,900	12.2	370,900	4.7	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by divisions.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ Does not include Alaska and Hawaii.

6/ Includes Alaska, Hawaii, and "Other" totals; see Table 2, footnote 6.

TABLE 2  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/  
(Thousand metric tons and thousand dollars)

State	1996					1997					
	Quantity				Value total 2/	Quantity 1st Qtr.	Per- cent change 3/	Quantity 2nd Qtr.	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	2nd Qtr.	3rd Qtr.	4th Qtr.	Total 2/							
Alabama	10,700	10,700	9,700	38,900	204,000	8,200	4.5	10,100	-5.6	83	13
Alaska 5/ 6/	--	--	--	3,500	21,500	--	--	--	--	--	--
Arizona 7/	--	--	--	5,250	31,200	--	--	--	--	--	--
Arkansas	6,900	7,300	6,500	26,400	177,000	5,100	-8.6	7,600	9.5	59	10
California 6/	11,800	14,100	11,900	46,700	289,000	9,200	2.4	11,600	-1.4	45	12
Colorado	3,100	3,000	2,500	9,950	65,100	2,000	49.2	2,600	-16.7	68	6
Connecticut 6/	1,800	2,300	1,100	5,310	40,100	100	7.8	1,200	-33.1	40	4
Delaware 5/	--	--	--	--	--	--	--	--	--	--	--
Florida	18,200	17,500	17,500	71,300	371,000	16,000	-11.6	16,300	-10.2	68	10
Georgia	18,600	17,500	15,600	64,300	399,000	14,000	11.3	17,600	-5.4	93	9
Hawaii 5/ 6/	--	--	--	7,700	76,200	--	--	--	--	--	--
Idaho 6/	300	800	700	2,120	9,340	300	-3.8	800	135.9	40	3
Illinois	16,600	23,400	19,300	66,500	365,000	8,100	12.6	19,200	15.9	65	12
Indiana 6/	13,400	19,400	14,600	54,600	262,000	10,200	41.1	14,100	5.2	77	13
Iowa	10,000	11,900	9,100	35,400	212,000	5,700	28.0	12,200	22.7	48	8
Kansas	6,300	6,400	6,400	23,400	111,000	4,600	9.5	6,700	6.1	63	11
Kentucky 6/	14,900	21,500	15,200	59,200	252,000	9,900	29.3	17,900	20.4	39	8
Louisiana 6/ 7/	--	--	--	2,650	27,900	--	--	--	--	--	--
Maine	900	1,100	800	3,160	16,400	400	25.2	1,100	23.8	48	4
Maryland	7,300	7,900	7,700	26,400	174,000	6,400	83.2	7,700	5.0	86	9
Massachusetts	2,600	2,900	3,000	9,020	79,400	700	22.6	2,500	-2.0	81	5
Michigan	11,200	13,700	11,400	38,900	132,000	2,800	7.5	12,200	8.5	77	10
Minnesota 6/	3,400	5,200	2,900	12,100	51,500	500	2.2	3,500	1.2	63	5
Mississippi 6/ 7/	--	--	--	2,300	9,300	--	--	--	--	--	--
Missouri 6/	17,200	19,400	18,100	67,000	315,000	13,400	9.2	18,900	9.9	43	17
Montana 6/ 7/	--	--	--	2,290	9,720	--	--	--	--	--	--
Nebraska	1,900	2,000	1,700	6,680	42,800	1,300	26.2	2,100	11.7	87	6
Nevada	600	700	600	2,370	21,200	600	13.1	500	-7.7	31	3
New Hampshire 6/	500	800	600	1,990	8,570	200	113.4	700	26.3	86	4
New Jersey	5,700	6,500	6,800	21,200	134,000	3,100	39.7	5,600	-1.8	55	7
New Mexico	1,200	900	700	3,350	17,200	600	-7.2	1,000	-16.5	34	4
New York	11,300	17,000	11,900	43,600	227,000	4,000	17.4	12,500	10.7	60	10
North Carolina	16,800	16,400	15,600	58,600	395,000	12,900	31.3	18,500	10.7	95	13
North Dakota 5/	--	--	--	--	--	--	--	--	--	--	--
Ohio	18,000	22,300	16,300	63,600	280,000	9,800	39.5	18,500	2.7	68	14
Oklahoma 6/	7,600	8,000	7,200	29,500	119,000	6,900	2.1	8,800	16.6	76	11
Oregon	6,400	5,900	5,200	21,900	102,000	4,100	-9.0	5,300	-16.1	38	11
Pennsylvania	24,900	26,800	23,900	87,400	538,000	14,500	22.5	26,700	7.2	56	22
Rhode Island 5/	--	--	--	1,100	8,090	--	--	--	--	--	--
South Carolina	6,700	6,500	5,800	23,800	143,000	5,400	9.7	6,800	1.9	101	9
South Dakota 6/	1,300	2,600	1,300	5,630	27,000	800	54.9	2,000	56.0	65	5
Tennessee	15,700	16,800	14,600	55,100	245,000	9,900	22.7	16,000	2.3	74	8
Texas	20,700	23,600	21,200	86,400	333,000	17,100	-18.0	21,200	2.7	58	12
Utah	800	1,100	1,100	4,000	14,400	800	-12.7	1,400	72.7	84	4
Vermont 7/	--	--	--	4,560	21,400	--	--	--	--	--	--
Virginia	16,600	17,900	16,400	59,700	352,000	12,600	43.1	17,000	2.4	72	12
Washington 6/	3,700	4,700	5,400	17,200	84,500	3,900	15.8	3,800	2.9	27	4
West Virginia 6/	4,000	4,300	3,700	14,000	89,300	2,400	12.5	3,600	-8.0	54	7
Wisconsin	6,600	10,000	6,900	25,800	108,000	2,700	18.6	8,000	21.1	43	8
Wyoming	1,600	1,700	1,100	5,050	29,800	600	-11.5	1,700	7.1	84	5
Other	--	--	--	7,000	73,500	--	--	--	--	--	--
Total	XX	XX	XX	1,330,000	7,110,000	XX	XX	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ To avoid disclosing proprietary data, certain State totals do not include all kinds of stone produced within the State; the portion not shown has been included with "Other."

7/ Due to a low number of reporting companies, no production estimates by quarters were generated.

TABLE 3  
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/  
(Thousand metric tons and thousand dollars)

Region/Division	1996					1997					
	Quantity				Value total 2/	Quantity 1st Qtr.	Per- cent change 3/	Quantity 2nd Qtr.	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	2nd Qtr.	3rd Qtr.	4th Qtr.	Total 2/							
Northeast:											
New England	12,300	15,400	11,500	44,100	247,000	6,700	35.7	12,100	-1.6	16	22
Middle Atlantic	16,200	19,500	14,900	57,700	311,000	7,300	4.3	18,300	12.7	26	26
Midwest:											
East North Central	53,900	71,300	54,200	198,000	745,000	22,100	21.2	55,800	3.7	43	50
West North Central	30,600	39,800	24,400	106,000	340,000	12,600	14.5	33,300	8.9	23	37
South:											
South Atlantic	19,900	20,200	18,000	72,700	316,000	16,500	12.4	20,000	0.6	46	40
East South Central	12,600	12,800	10,300	43,100	181,000	7,400	-0.6	11,700	-7.2	37	21
West South Central	28,200	25,300	22,900	99,800	441,000	19,300	-17.7	24,900	-11.4	35	15
West:											
Mountain	44,800	44,800	40,300	165,000	722,000	33,400	-4.3	41,800	-6.8	38	31
Pacific 5/	45,600	52,200	41,600	168,000	858,000	35,400	22.6	46,800	2.7	47	26
Total 2/	264,000	301,400	238,100	6/968,000	6/4,210,000	160,700	6.8	264,700	0.3	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by divisions.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ Does not include Alaska and Hawaii.

6/ Includes Alaska and Hawaii.

TABLE 4  
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/  
(Thousand metric tons and thousand dollars)

State	1996					1997					
	Quantity				Value total 2/	Quantity 1st Qtr.	Per- cent change 3/	Quantity 2nd Qtr.	Per- cent change 3/	Percent cover- age	Number of comp. 4/
	2nd Qtr.	3rd Qtr.	4th Qtr.	Total 2/							
Alabama	4,000	3,800	3,400	14,400	60,500	2,600	-17.4	3,800	-4.2	39	8
Alaska 5/	--	--	--	13,900	50,000	--	--	--	--	--	--
Arizona	11,100	10,500	9,700	41,100	207,000	8,900	-9.6	10,300	-7.6	66	8
Arkansas	2,900	2,900	2,400	10,700	45,100	2,100	-13.4	3,100	5.5	56	4
California	29,400	32,800	27,000	108,000	602,000	23,100	23.2	29,600	0.7	55	14
Colorado	10,600	11,500	8,600	36,100	150,000	6,800	26.8	10,000	-6.1	38	7
Connecticut	2,200	2,600	1,800	7,380	43,600	900	20.8	1,900	-13.1	20	5
Delaware 6/	--	--	--	3,660	12,100	--	--	--	--	--	--
Florida	5,300	5,100	4,900	20,200	72,800	4,800	0.6	5,500	3.2	57	9
Georgia	1,900	1,800	1,600	6,630	26,900	1,300	-4.0	1,700	-6.8	30	6
Hawaii 5/	--	--	--	400	4,000	--	--	--	--	--	--
Idaho	3,100	3,900	4,400	14,600	48,900	2,900	-7.3	4,100	31.3	22	4
Illinois	10,500	12,300	9,900	36,000	147,000	3,900	20.2	11,700	11.6	43	10
Indiana	7,400	9,700	6,500	26,400	100,000	3,500	20.8	6,600	-10.1	54	9
Iowa	4,500	6,400	2,800	14,900	60,400	1,100	-1.9	4,500	-0.6	23	7
Kansas	5,600	4,300	3,200	15,000	40,400	2,300	17.7	4,400	-20.8	27	6
Kentucky	2,000	2,200	1,800	7,010	25,700	1,300	26.5	2,000	0.6	24	3
Louisiana	3,300	2,900	2,800	11,700	52,200	2,100	-23.5	2,700	-17.1	55	4
Maine	2,000	2,600	1,600	6,790	28,500	600	-17.8	2,700	39.8	12	4
Maryland	2,600	3,400	2,600	10,200	65,400	2,700	67.8	3,100	21.2	38	6
Massachusetts	3,900	4,900	4,100	15,000	87,200	3,100	44.4	3,800	-3.3	15	6
Michigan	13,900	21,200	15,400	54,700	186,000	5,600	31.8	15,600	12.2	44	9
Minnesota	8,400	12,500	8,600	33,000	104,000	2,900	-18.8	12,400	47.5	24	10
Mississippi	3,800	4,000	3,000	13,000	59,300	2,100	-1.8	3,200	-16.4	44	6
Missouri	3,100	3,600	2,500	10,600	39,200	1,900	29.2	2,800	-9.9	43	5
Montana 6/	--	--	--	8,210	32,800	--	--	--	--	--	--
Nebraska	3,800	6,300	3,400	14,300	49,300	1,900	115.7	4,400	17.0	19	6
Nevada	5,400	4,900	5,200	21,100	103,000	4,800	-13.0	3,700	-31.3	43	4
New Hampshire	1,600	2,300	1,600	6,130	29,400	1,200	94.4	1,600	1.1	25	4
New Jersey	3,800	3,200	4,000	12,700	73,900	2,500	50.3	5,000	28.8	25	4
New Mexico	2,900	2,800	2,700	11,000	53,800	2,000	-24.0	2,800	-4.2	41	3
New York	8,300	10,800	7,300	29,700	147,000	3,500	4.6	8,900	7.3	20	11
North Carolina	2,700	2,900	2,700	10,300	51,600	3,000	50.8	3,400	25.0	34	5
North Dakota 5/	--	--	--	8,500	24,200	--	--	--	--	--	--
Ohio	12,700	16,400	13,300	47,100	205,000	6,000	28.5	11,700	-7.7	45	16
Oklahoma	2,400	2,100	1,900	8,140	26,400	1,800	3.8	2,400	1.8	38	6
Oregon	4,600	6,300	5,200	19,000	89,300	3,900	36.4	6,300	38.5	27	5
Pennsylvania	4,100	5,500	3,700	15,300	84,400	1,400	-24.0	4,500	8.4	37	12
Rhode Island 6/	--	--	--	3,000	23,300	--	--	--	--	--	--
South Carolina	2,900	2,700	2,300	9,950	32,800	2,300	9.1	2,800	-2.5	44	6
South Dakota	2,600	4,500	2,000	9,530	29,100	900	76.8	2,600	0.1	17	5
Tennessee	2,700	2,900	2,100	8,680	39,900	1,500	44.9	2,700	0.8	33	6
Texas	19,700	17,300	15,700	69,300	308,000	13,200	-20.3	16,400	-16.9	27	7
Utah	8,700	10,600	7,800	30,200	103,000	3,800	20.9	10,800	25.0	14	3
Vermont	1,700	2,000	1,500	5,770	19,900	400	-35.9	1,300	-26.0	13	3
Virginia	2,900	2,900	2,600	10,200	44,900	1,800	-2.2	2,300	-22.0	63	8
Washington	11,500	13,400	9,300	41,300	171,000	8,100	15.5	11,400	-0.5	35	9
West Virginia	500	500	400	1,600	6,890	200	5.7	500	-3.6	100	4
Wisconsin	9,500	11,600	9,300	33,500	107,000	2,800	-11.6	10,900	14.0	32	11
Wyoming	900	500	600	2,450	11,300	600	27.1	400	-53.2	21	3
Total	XX	XX	XX	968,000	4,210,000	XX	XX	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ Due to a low number of reporting companies, no production estimates by quarters were generated.